



Analytical Report

Client : LG International Corp
 Your Ref. : P-38/2017-00126-IL
 Date of Job : 18TH APRIL 2017
 Ship : MT "TAMIAI NAVIGATOR"
 Cargo : Methanol in bulk
 Terminal : Pyeongtaek, Korea
 Installation : West Pyeongtaek Tank Terminal
 Date of Report : 19TH APRIL 2017

The followings are the results of analysis performed by SGS laboratory with the composite sample of shore tank(s) after discharge drawn by SGS inspector.

TEST ITEMS	UNIT	METHOD	Specification		TEST RESULTS	
			MIN	MAX	108	308
Appearance		IMPCA 003	Clear & free		Clear & free	Clear & free
Pt-Co Colour	Pt-Co	ASTM D1209		5	3	3
Purity (on dry basis)	wt%	IMPCA 001	99.85		>99.99	>99.99
Ethanol	mg/kg	IMPCA 001		50	14	13
Acetone	mg/kg	IMPCA 001		30	<5	<5
Water	wt%	ASTM E1064		0.1	0.007	0.008
Distillation range at 760 mm Hg	°C	ASTM D 1078	MAX 1.0 Include 64.6 °C		0.2	0.3
IBP	°C				64.4	64.5
DP	°C				64.6	64.8
Specific Gravity at 20/20 °C		ASTM D4052	0.791	0.793	0.7927	0.7927
Potassium Permanganate at 15 °C	min	ASTM D1363	60		>60	>60
Carbonizable Substances	Pt-Co	ASTM E346 (Part B)		30	5	5
Acidity as acetic acid	mg/kg	ASTM D1613		30	8	7
Hydrocarbons		ASTM D1722	Pass		Pass	Pass
Non Volatile matter	mg/L	ASTM D1353		8	3	3
Chloride as Cl	mg/kg	IMPCA 002		0.5	<0.25	<0.25
Sulphur	mg/kg	ASTM D5453		0.5	<0.5	<0.5
Iron	mg/kg	ASTM E394		0.1	0.02	0.02

Remark) < = Less than, > = More than

Pyeongtaek, Korea 19th April 2017
 SGS Korea Co., Ltd

NC Moon / Inspector
 Oil, Gas & Chemicals Services

Note: The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the above results. Users of the data shown on this report should refer to the latest published revisions of ASTM D-2244, IP 267 and ISO 4259 and when utilizing the test data to determine conformance with any specification or process requirement. This Test Report is issued under the Company's General Conditions of Service (copy available upon request) or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.